Amendments to the Claims:

1. (Previously presented) A method to manage a power load comprising:

receiving energy rating data at an on-premise processor transmitted by a distribution network from a host processor and storing the energy rating data in a memory, the rating data including a schedule pertaining to time and energy costs;

receiving at the on-premise processor a message communicated using an 802.11X-based wireless protocol from a power load controller requesting energy rating data;

retrieving the energy rating data from the memory and sending a response message including the energy rating data using the 802.11X-based wireless protocol from the on-premise processor to the power load controller; and

determining in the power load controller whether to activate the power load based at least in part on the energy rating data.

2. (Previously presented) The method of claim 1 wherein the energy rating data further comprises a first time period associated with a first usage rate and a second time period associated with a second usage rate.

3. (Previously presented) The method of claim 2 wherein the power load controller determines whether to activate the power load is based further at least in part on the current time.

4. (Previously presented) The method of claim 1 wherein the distribution network transmits the rating data wirelessly.

5. (Previously presented) The method of claim 4 wherein the rating data is transmitted wirelessly using an 802.11X-based protocol.

6. (Previously presented) A method for managing a power load of an appliance, comprising:

sending an energy rate request message from an appliance using an 802.11X-based protocol;

receiving an energy rate schedule using the 802.11X-based wireless protocol, the energy rate schedule comprising a first time period for a first usage rate and a second time period for a second usage rate; and

determining in the appliance whether to activate a power load based in part on the energy rate schedule and a current time.

7. (Previously presented) The method of claim 6 further comprising:

storing the energy rate schedule in a memory in the appliance.

8. (Previously presented) A method of managing a power load comprising:

receiving at an on-premise processor a first request message communicated using an 802.11X-based protocol from a power load controller pertaining to energy rating data;

sending from the on-premise processor a second request message over a distribution network to the host processor pertaining to energy rating data;

receiving at the on-premise processor a first rating response message over the distribution network from the host processor, the second request message including energy rating data;

sending from the on-premise processor to the power load controller a second rating response message using an 802.11X-based protocol including the energy rating data; and

determining in the power load controller whether to activate the power load based at least in part on the energy rating data.

9. (Previously presented) The system of claim 8 wherein the power load controller further determines whether to activate the power load based on the current time.

10. (Previously presented) The system of claim 8 wherein the energy rating data comprises a first time period associated with a first usage rate and a second time period associated with a second usage rate.

11. (Previously presented) The system of claim 8 wherein the power load activated is one from the group of an air conditioning unit, an induction motor, a compressor, or a heating load.

12. (Previously presented) A method to control the activation of a power load comprising:

receiving at an on-premise processor a power restriction status indicator transmitted over a distribution network from a load management host processor and storing the power restriction status indicator in a memory of the on-premise processor;

receiving a load authorization request communicated using an 802.11X-based wireless protocol transmitted from a power load controller co-located with the power load, the load authorization request received by the on-premise processor;

retrieving the power restriction status indicator data stored in the memory and determining a restriction status;

generating a response message authorizing or denying activation of the power load based on the value of the restriction status, the response message including an address associated with the power load controller; and

communicating the response message using the 802.11X-based wireless protocol from the on-premise processor to the power load controller.

13. (Previously presented) The method of claim 12 wherein the power restriction status indicator comprises a first value and a second value, the second value associated with a time duration.

14. (Previously presented) The method of claim 12 further comprising:
recording in the memory a time associated with the generating of the response message authorizing or denying activation of the power load.

15. (Previously presented) The method of claim 12 wherein the on-premise processor is contained in a power meter.

16. (Previously presented) The method of claim 12 wherein the power load controller controls is at least one of an air conditioning unit, an induction motor, or a heating load.

17. (Previously presented) The method of claim 12 wherein the distribution network is one from the group of paging network, digital cellular network, telephone network, power line carrier network, Internet, and 802.11X-based LAN.

18. (Previously presented) A method to control activation of a power load, comprising:

receiving at an on-premise processor a power restriction indication communicated from a load management host using a distribution network, the power restriction indication stored in a memory of the on-premise processor;

receiving at the on-premise processor a first authorization request to activate the power load communicated using an 802.11X-based wireless protocol from a power load controller controlling the power load;

determining in the on-premise processor a power restriction status based on the power restriction indication data stored in the memory of the on-premise processor;

communicating a first response from the on-premise processor to the power load controller using the 802.11X-based wireless protocol authorizing power load activation if the power restriction status is a first value;

communicating a second authorization request from the on-premise processor to the load management host processor using the distribution network indicating an address of the on-premise processor if the power restriction status is a second value;

receiving a second authorization response from the host processor at the on-premise processor using the distribution network indicating an authorization or a denial of activation of the power load; and

sending a third authorization response from the on-premise processor using the 802.11X-based wireless protocol to the power load controller, the third authorization response message either authorizing activation of the power load if the second authorization response authorizes activation of the power load, or denying activation of the power load if the second authorization response denies activation of the power load.

19. (Previously presented) The method of claim 18 wherein the power restriction indication further comprises a time duration.

20. (Previously presented) The method of claim 18 where the step of determining in the on-premise processor a power restriction status further comprises processing a time indication.

21. (Previously presented) The method of claim 18 further comprising:

receiving at the on-premise processor a second power restriction indication communicated from the load management host using a distribution network, the power restriction indication stored in the memory of the on-premise processor.

22. (Withdrawn) The method of claim 18 wherein the power load comprises at least one of a heating load, air conditioning load, or induction motor load.

22. (Currently amended) A method to control a power load comprising:

receiving at an on-premise processor a first authorization request message to activate a power load, the first authorization message sent from a power load controller operatively connected to the power load;

sending a second authorization request message transmitted from the on-premise processor using a distribution network to a host processor indicating an address associated with the power load controller;

receiving a first authorization response message at the on-premise processor transmitted using the distribution network from the host processor indicating authorization or denial of activating the power load; ~~and~~

generating in the on-premise processor a second authorization response message indicating an authorization or denial of activating the power load; and

sending the second authorization response message using the 802.11X-based wireless protocol from the on-premise processor to the power load controller.

23. (Previously presented) The method of claim 22 wherein the second authorization message further comprises a time duration.

24. (Previously presented) The method of claim 22 further comprising :
recording an indication of a time associated with the sending of the second authorization response message.

25. (Previously presented) The method of claim 22 further comprising the step of
receiving an acknowledgment message using the 802.11X-based wireless protocol from the power load controller at the on-premise processor in response to sending the second authorization response message.

26. (Previously presented) A method to control a power load comprising:
sending a first notification message from a host processor to an on-premise processor indicating a request for controlling a power load;
determining a first address in the memory of the on-premise processor;
communicating a first power control request message using an 802.11X-based wireless protocol incorporating the first address to a power load controller associated with the first address;
deactivating the power load by the power load controller in response to the power control request message;
receiving a first acknowledgement message communicated using the 802.11X-based protocol from the power load controller to the on-premise processor; and
receiving a second acknowledgement message at the host processor, the second acknowledgement message sent by the on-premise processor in response to receiving the first acknowledgement message.

27. (Previously presented) The method of claim 26 wherein the content of the first acknowledgement message includes in part the content of the second acknowledgement message.

28. (Previously presented) The method of claim 26 further comprising:

recording a time and address of the on-premise processor associated with the sending of the second acknowledgment message from the on-premise processor.

29. (Previously presented) The method of claim 26 wherein the power control request message further comprises a time duration.

30. (Previously presented) A method to control a power load, comprising:

sending a first notification message of an impending power control request message to an on-premise processor from the power control host processor using an 802.11X-based protocol;

receiving a first acknowledgement message at a power control host processor from the power load controller using the 802.11X-based protocol;

sending a power control request message to the on-premise processor from the power control host processor using the 802.11X-based protocol requesting deactivation of the power load;

receiving a second acknowledgement message from the on-premise processor acknowledging deactivation of the power load wherein the message is communicated using an 802.11X-based protocol; and

recording in the power control host processor a load deactivation indication in a data structure associated with the on-premise processor.

31. (Previously presented) The method of claim 30 wherein the power control request message comprises a time duration

32. (Previously presented) The method of claim 31 further comprising:

activating the power load after the time duration.

33. (Previously presented) The method of claim 30 wherein the 802.11X-based protocol includes at least one of the group of 802.11a, 802.11b, and 802.11g.

34. (Previously presented) A method to deactivate a utility meter, comprising:

reading a first status indicator associated with the utility meter in a memory of a utility meter management host processor;

determining the status of the utility meter is active;

sending a first deactivation request message from the utility meter management host processor to an on-premise processor using a distribution network indicating a request to deactivate the utility meter;

deactivating the utility meter so that no output is available from the utility meter;

sending a first acknowledgement deactivation message from the on-premise processor to the utility meter management host processor using the distribution network, the acknowledgment confirming that output is no longer available from the utility meter; and

recording in the memory of the utility meter management host processor a date and an activation status indicator associated with the utility meter.

35. (Previously presented) The method of claim 34 wherein the first deactivation request message comprises a time duration.

36. (Previously presented) The method of claim 34 wherein the utility meter is a gas meter.

37. (Previously presented) The method of claim 34 wherein the utility meter is a water meter.

38. (Previously presented) The method of claim 34 wherein the utility meter is a power meter.

39. (Previously presented) The method of claim 34 further comprising:

sending a second deactivation request message from the on-premise processor to a second utility meter indicating a request to deactivate the second utility meter using the 802.11-based wireless protocol;

deactivating the second utility meter so that no output is available from the second utility meter; and

receiving a response at the on-premise processor from the second utility meter using the 802.11X-based wireless protocol indicating the second utility meter is deactivated.

40. (Previously presented) A method to activate a power meter, comprising:

sending a first activation request message from a host processor to an on-premise processor, the first activation message indicating a request so as to activate a power meter;

activating the power meter to provide power available from an output of the power meter;

sending an acknowledgement activation response message from the on-premise processor to the power control host processor; and

recording an active status indication associated with the power meter in a memory of the host processor.

41. (Previously presented) The method of claim 40 wherein the acknowledgment activation response message includes meter reading data.

42. (Previously presented) The method of claim 40 wherein the host processor further records the meter reading data.

43. (Previously presented) A method to read energy related data in a power meter comprising:

sending a request message to an on-premise processor directing the on-premise processor to read energy related data from a power meter identified by a meter identification number using an 802.11X-based wireless protocol;

retrieving energy related data stored in a memory of the power meter by the on-premise processor using the 802.11X-based wireless protocol and the meter identification number;

receiving a response message sent at a host processor communicated from the on-premise processor using the 802.11X wireless protocol indicating the energy related data and the meter identification number; and

recording the energy related data associated with the meter identification number in a data structure in memory of the host processor along with a date and a time information.

44. (Previously presented) The method of claim 43 wherein the request message to an on-premise processor directing the on-premise processor to read energy related data from a power meter is sent from the host on a periodic basis.

45. (Previously presented) The method of claim 43 wherein the energy related data is usage related.

46. (Previously presented) A method for reading data from a utility meter, comprising:

storing a utility meter address and a utility meter reading schedule in an on-premise processor indicating a time to read data from at least one utility meter;

communicating a meter reading request message incorporating the utility meter address from the on-premise processor to the utility meter using an 802.11X wireless protocol at a time indicated by the meter reading schedule;

receiving a meter reading response message at the on-premise processor containing usage related data communicated using the 802.11X wireless protocol; and

sending a meter reading report message from the on-premise processor to a host processor, the meter reading report message including usage data, meter type, and the utility meter address.

47. (Previously presented) The method of claim 46 wherein the utility meter comprises one from the group of water meter, gas meter, and power meter.

48. (Previously presented) A method for a host processor to read measurement data from a utility meter, comprising the steps of:

receiving a first request message at the on-premise processor sent from the host processor requesting measurement data from an utility meter wherein the request includes a meter identifier associated with the utility meter;

sending a first acknowledgment message in response to the first request by the on-premise processor to the host processor indicating error free receipt of the first request;

sending a second request message from the on-premise processor to the utility meter communicated using a 802.11X wireless protocol requesting measurement data from the utility meter;

receiving a first response message at the on-premise processor from the utility meter communicated using the 802.11X wireless protocol including the measurement data and a date;

sending a second acknowledgement message from the on-premise processor to the host processor including the measurement data and the date; and

recording the measurement data and the date in a data structure associated with the meter identifier in the host processor.

49. (Previously presented) The method of claim 48 further comprising:
erasing the measurement data from a memory in the on-premise processor.

50. (Previously presented) A method for a host processor to obtain measurement data from a utility meter, comprising:

receiving periodic measurement data at the on-premise processor from the utility meter communicated using an 802.11X wireless protocol containing a utility meter identification number;

storing the measurement data and the identification number in a memory in an on-premise processor along with time-related data;

receiving a first request message at the on-premise processor from the host processor requesting the measurement data for the utility meter, the first request message including the utility meter identification number;

retrieving the measurement data and the time-related data in the memory of the on-premise processor associated with the utility meter identification number; and

sending a reporting message from the on-premise processor to the host processor incorporating the measurement data, the utility meter identification number, and the time-related data.

51. (Previously presented) The method of claim 50 further comprising:

receiving an acknowledgment message from the host processor at the on-premise processor indicating receipt of the reporting message; and

erasing the measurement data and time-related data from the memory in the on-premise processor.

52. (Previously presented) A method of reducing power consumption, comprising:

determining in a load management host a need to reduce power consumption;

accessing a data base comprising power consumption related data, the power consumption related data associated with a power consumer;

selecting a specific power consumer, the specific power consumer identified in the database as participating in a load reduction program;

communicating from the load management host a load reduction request to the an on-premise processor, the on-premise processor associated with the power consumer;

recording a load reduction notification indication in the power consumption related data associated with the power consumer; and

determining whether a load threshold has been reached.

53. (Previously presented) The method of claim 52 further comprising the step of:

receiving an indication of whether the on-premise processor is able to reduce power consumption; and

recording an a load reduction value associated with the power consumer in the database.

54. (Previously presented) The method of claim 53 further comprising the steps of:

determining whether the load reduction value indicator exceeds a threshold.

55. (Previously presented) The method of claim 53 wherein the power consumer's bill is determined in part by the load reduction value in the database.

56. (Previously presented) The method of claim 52 where the load reduction request comprises a specified time duration.

57. (Previously presented) A system for managing power loads comprising:

a management host processor capable of communicating a load reduction request message to at least one of a plurality of on-premise processors;

a database operatively connected to the management host processor, the database containing energy related customer records, the records containing an address associated with at least one of a plurality of on-premise processors and an indication of whether the at least one of a plurality of on-premise processors is able to receive a load reduction request; and

a communications network operatively connected to the management host processor capable of communicating at least one load reduction request to the at least one on-premise processors as identified by the address.

58. (Previously presented) The system of claim 57 wherein the database further comprises:

memory storing input power load data received at the at least one on-premise processor over the communications network, the management host processor comparing the power load data to a predefined threshold value stored in the memory.

59. (Previously presented) A system for managing power loads, comprising:

a management host processor storing a plurality of records associated with a plurality of power meters including communication addressing data associated with the plurality of power meters and power-related usage data, the management host processor operatively connected to a distribution network capable of sending and receiving messages of a first protocol for the purpose of managing activation of a power load;

an on-premise processor operatively connected the distribution network receiving messages of a first protocol from the management host processor, the on-premise processor co-located with at one of the plurality of power meters, the messages of a first protocol for the purpose of managing activation of the power load, the on-premise processor including an 802.11X-based wireless protocol interface for sending and receiving messages of a second protocol to control activation of the power load; and

a power load controller associated with a power load operatively communicating with the on-premise processor using an 802.11X-based wireless protocol to send and receive messages of a second protocol to control activation of the power load, the power load controller controlling activation of the power load.

60. (Previously presented) The system of claim 59 wherein the distribution network comprises at least one of a paging network, digital cellular network, 802.11X-based wireless network, telephone network, cable based Internet, and power line carrier network.

61. (Previously presented) The system of claim 59 wherein the power load comprises at least one of an induction motor load, heating load, or an air conditioning load.

62. (Previously presented) A system for managing a utility meter, comprising:

a management host processor storing records associated with a plurality of utility meters including communication address data associated with the plurality of utility meters and measured usage data, the management host processor operatively connected to a distribution network capable of sending and receiving messages of a first protocol for controlling a specific utility meter; and

an on-premise processor operatively connected the distribution network receiving the messages of the first protocol from the management host processor, the on-premise processor using an 802.11X-based wireless protocol interface for sending and receiving messages of a second protocol to the specific utility meter, the messages of a second protocol including measurement data associated with the specific utility meter.

63. (Previously presented) The system of claim 62 wherein the specific utility meter comprises a water meter, gas meter, or power meter.

64. (Previously presented) The system of claim 62 wherein the message controlling the meter activates or deactivates the utility meter.

65. (Previously presented) The system of claim 62 wherein the management message controlling the meter returns a status indication of the meter.

66. (Previously presented) A system for controlling a power load, comprising:

a processor capable of receiving a signal from a sensor, the signal related to an ambient temperature of the sensor, the processor further capable of generating a control signal;

an 802.11X-based transceiver, operatively connected to the processor, capable of communicating data received from an antenna to the processor; and

a switch, operatively connected to the processor receiving the control signal from the processor, the switch controlling activation of a power load.

67. (Previously presented) The system of claim 66 wherein the power load comprises at least one of an air conditioner, an inductive motor, a heating element, a light, a pump, or a compressor.

68. (Previously presented) The system of claim 66 wherein the sensor detects air temperature.

69. (Previously presented) The system of claim 68 further comprising:

a display operatively connected to the processor, the display indicating the ambient air temperature detected by the sensor.

70. (Previously presented) The system of claim 66 wherein the processor generates the control signal to the switch in response to receiving data from the 802.11X-based transceiver.

71. (New) The method of claim 18 wherein the power load comprises at least one of a heating load, air conditioning load, or induction motor load.